

Amendments to and Listing of the Claims

Please cancel claims 4-9, amend claims 1 and 2, and add claims 10-11 so that the claims read as follows:

1. (currently amended) A method for measuring the concentration of impurities in helium gas by ion mobility spectrometry analysis, comprising ~~carrying out the analysis under one of the following conditions:~~

~~employing as a sample gas a helium-argon mixture formed of the helium whose concentration of impurities is to be analyzed and pure argon, this mixture containing 0.1 to 50% argon, and pure helium as a counterflow gas in a separation zone of the ion mobility spectrometer; or~~

~~employing as [[the]] a sample gas a mixture of the helium whose concentration of impurities is to be analyzed ~~or a mixture of this helium with~~ and up to 50% pure argon, this mixture containing 0.1 to 50% of argon, and pure argon as [[the]] a counterflow gas in [[the]] a separation zone of [[the]] an ion mobility spectrometer; ~~or~~~~

~~employing as the sample gas a helium-argon mixture formed of the helium whose concentration of impurities is to be analyzed and pure argon, and as the counterflow gas a helium-argon mixture containing no impurities, wherein these mixtures have an argon concentration of 10 to 80%.~~

2. (currently amended) The method according to claim 1 wherein, ~~when helium or a helium mixture is used as the sample gas and pure argon is used as the counterflow gas,~~ the ratio of a flowrate of the counterflow gas to a flowrate of the sample gas is at least 10.

3. (Original) The method according to claim 2, wherein the ratio is 15 to 20.

4-9. (Canceled)

10. (New) The method according to claim 1, wherein the mixture contains 0.1 to 50% argon.

11. (New) The method according to claim 1, wherein the mixture contains only helium.